

Fig. 1A

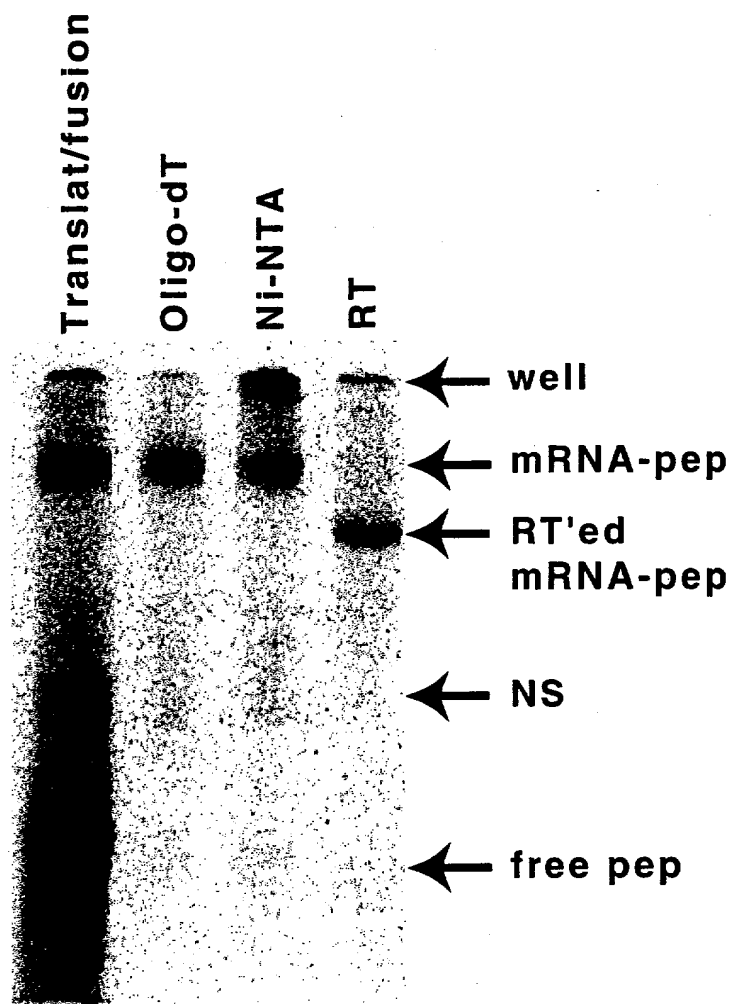


Fig. 1B

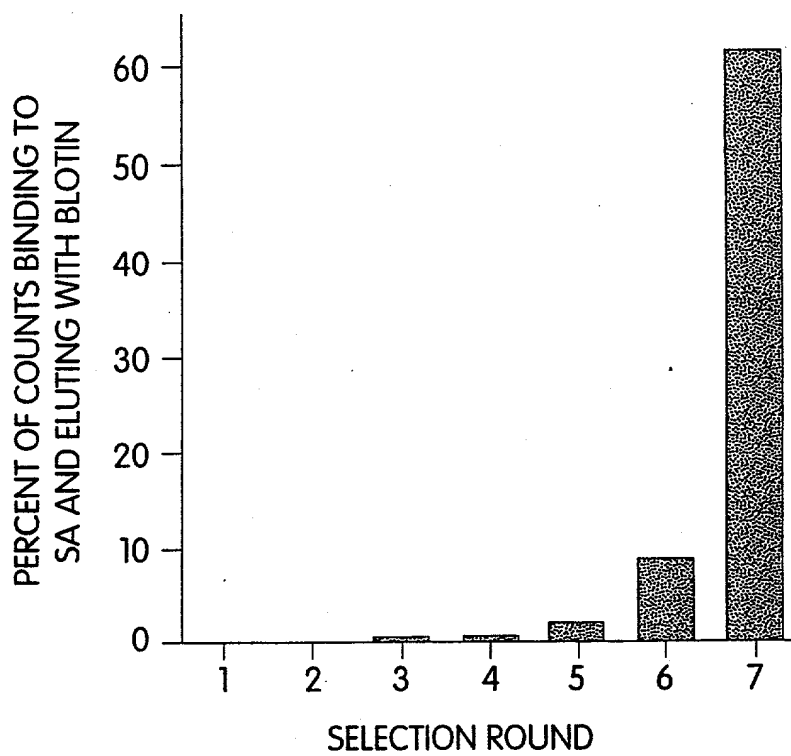


Fig. 2A

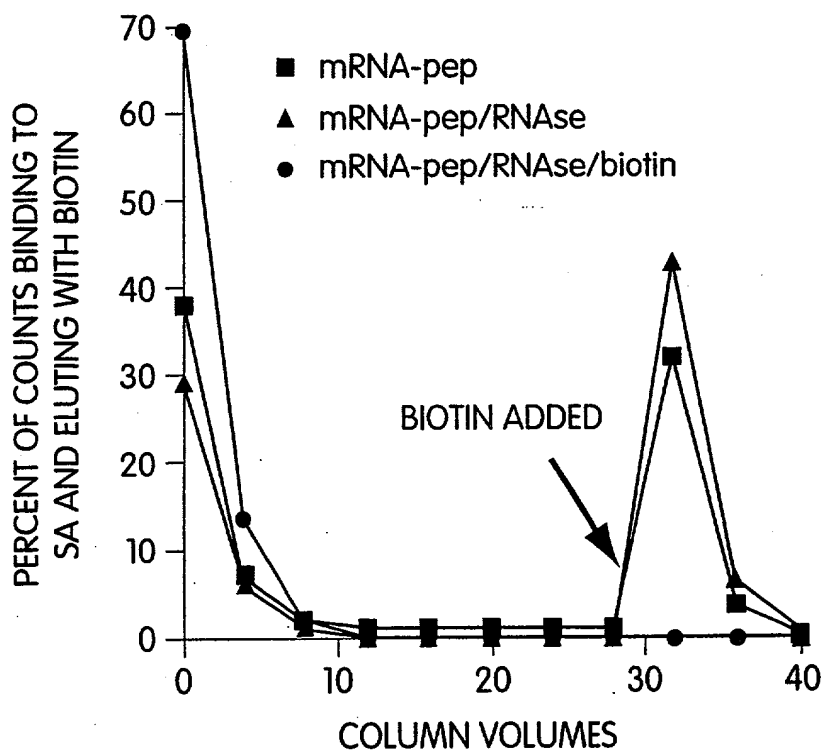


Fig. 2B

name #	SEQ ID NO:
SB1 3	<u>MDEKTHCTISMGAVPLVPHHHPQGDPLRLHRRPQALLVRRHPQGD</u> <u>LVALVEHHEGVDRGLVALPELHAEELGEPVGLVQGPVEQVQVWDALVWRLPPS</u>
SB2 2	<u>MDEKTHCFHPGDHLVRLVEELQALAEGLQRCGRQPHRLPRRRPHLQLLLDEAHPQAGPLRERAHQVDRLLQLQHHPQCGDRLLQQPDHPLELVWRLPPS</u>
SB3 4	<u>MTRRPASSSSCVRHLLLRQGEHGHQALEDRDKARHVRIVEGDEVILGGLDLARARHEALHPQAGLVHLPLHGGDLGGHLRLVLEAHHPQGDRLGLAVHHH</u>
SB4 1	<u>MDEKTHWGISWTRGEPLLHHPQAGRLPLDRRRARHRRITIGAEPGGVDHGLRLLELDDHRPLVPDHPHPQGRGPLQRGDLQVVPVLRHRAHVLGLGLAAATIT</u>
SB5 3	<u>MDEKTHWNVVYHPQGDLLVRGHGHDVEALHDQGLHQLDLLVGPPEVVRALRGEVLGGLRRLVPLDHPQGEALDQARQRPQHLLHHRALPPALVWRLPPS</u>
SB6 1	<u>MDEKTHWLNFFELLARLDGLREGEDHPLVLRHHPQGDGLLDQLGRHRALEDGEVREGDRPLDQCGEEDLGALVDDDEVLGDLVHVGVHVDPLVCGCHHH</u>
SB7 1	<u>MDEKTHWFTLNSFPTHMMSAVGNGKIDCSFNMNLSLHNWLSGHPDGCALDDQLHPQGDALVGRDDGVVQALRLEGOHQHRRLAQRADRRHRLQVWRLPPS</u>
SB8 1	<u>MDEKTHCTTELNFSTHVKLHHHPQGDALLDDGVRRPHPLADEGGGLDQGLGHRGVVAERLARRDPEVILEGLVERHRLVPRLRHGGERHAEPLVWRLPPS</u>
SB9 1	<u>MDEKTHCNTGLYDGAADCFNELNKDVAPLVEGRHDLVEGLLLEHHPQGDPLVAHRQLVHHPLLRGERHRRALVPQEHQPHRLQPVVDLGRRLVWRLPPS</u>
SB10 1	<u>MDEKTHWHERAQELVGGLLLLHDHPQRLLEPRGPRPLRGLVHERGHQPLAGRVEEADGGLLRDGGGELEPLVREGEDHLEPLDDELDAGRGLVWRLPHHH</u>
SB11 1	<u>MDEKTHWHERVHHLADGLEQHPQGORRPLVERHRQVPRGLVRELQHEGLPLEHPAGVHVIRLHQGDDRDVDGLVDGHRDVRGLEREVEGDPHRLVWRLPPS</u>
SB12 4	<u>MDKDPILLEELERLVRHHPQGGLLPLRGQVGHDAERLGAEVDDLRGGLLDEPQRAVAGLHHVPHRVGQRLVHEVRELDEGLLDQRDDLRLQRLVWRLPPS</u>
SB13 2	<u>MEREDPLDEQLRELREALVDHPQGAQALHRHDGGEHVPLRRVQHRQLQPGQLHHLEPQLGLLGELQARLQPLAGEHEGDCAGLQRPVPGHQGRRLVWRLPPS</u>
SB14 1	<u>MDEKTHRTLSVSLSFNDWLQTKACWRLVEGLHHPQGLVREHEVDVLPLAEVQVVGGLADGVEQPGGGLHRAQRVDHPLPDHAGQVLGRLVWRLPPS</u>
SB15 1	<u>MDEKTHWLEDLKGVLKDLMDFTKDCRSRVPQPLLHHRDGEVPVLLREAGRDLCGLGPRAPRQARPLHHGRHDLHEPLVLQDHPQGGPLVCGCHHH</u>
SB16 1	<u>MDEKTHWVLQLHPQGDRLGPRHGGDDVRLVGQGEGLVLEGLDGRPRRRRRLPREDEHRVRALVDQVRDLAERLVEEVGGVEALRHLGLPQDEPRSGGCHHH</u>
SB17 2	<u>MDEKTHWVGLQEPGLHGGVGEVPGGLVLRHHPQDRDLVDGVGPHGRALARRPHRVVEGLHLLLRQGERLPPDGPRLGLLGELDRADPALVWRLPPS</u>
SB18 1	<u>MDEKTHCAVNVNVLTHWCHRVAHLQPLDHPQGDHLRLEPLGHALVDPLVQGVVEVVRPLQLDVGVRVALVEQVAEVGEGLDHEAGQAHGALVWRLPPS</u>
SB19 1	<u>MDEKTTGWRGGHVVEGLAGELEQLRARLEHHPQGQREPLVQEVEDVEGLVQDLHGVVAGLLDPVEKLLTDMFKFKNVSKDCKMTFYLEMVDWSGGCHHH</u>
SB20 1	<u>MNEKTHCKLNFKNVNIADWLAEFHGGQGLGRRDGVVQRLVDGVQEVERLDRDPGLGDLRLHHRDRLRLGGEHLLRDHPLEPDDHLVVGGLVWRLPPS</u>

Fig. 3

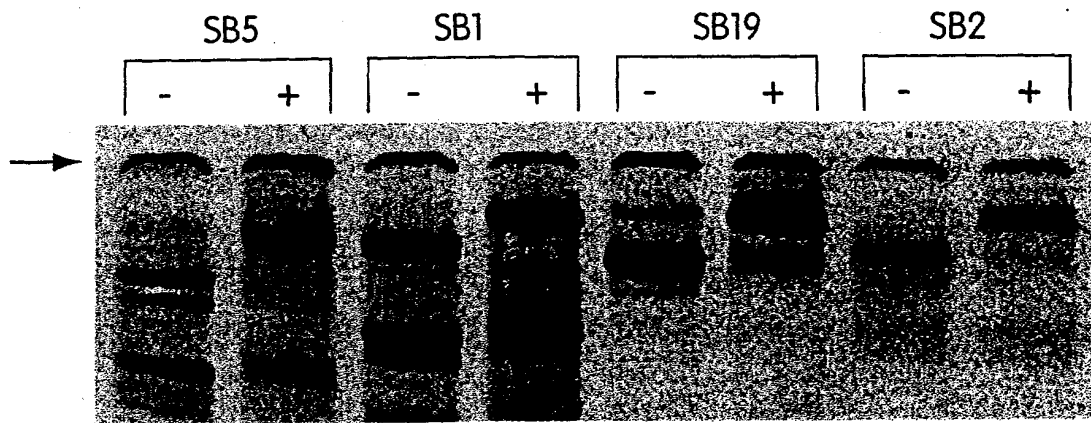


Fig. 4A



Fig. 4B

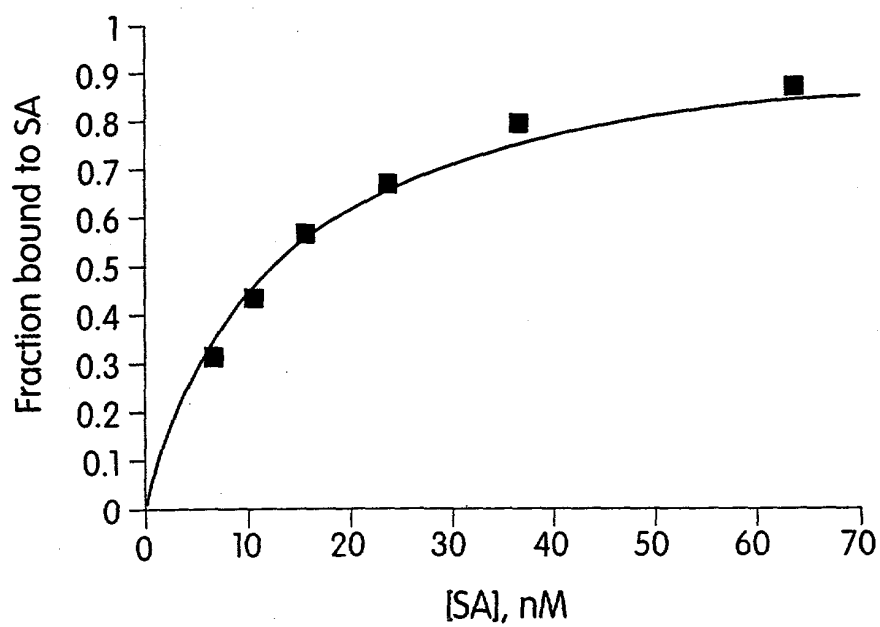


Fig. 4C

		% binding	SEQ ID NO:
FL	MDEKTTGWRGCHVVEGLAGELEQLRARLEHHPQGQREPLVQEVEDVDEGLVQDLHGVAAGLLDPVEKLLTDWFKFKNVSKDCKMTFYLEYMDWGGCKLG	85	21
C1	MDEKTTGWRGCHVVEGLAGELEQLRARLEHHPQGQREPLVQEVEDVDEGLVQDLHGVAAGLLDPVEKLLTDWFKFKNV	87	22
C2	MDEKTTGWRGCHVVEGLAGELEQLRARLEHHPQGQREPLVQEVEDVDEGLVQDLHGVAAGLLDPVE	88	23
C3	MDEKTTGWRGCHVVEGLAGELEQLRARLEHHPQGQREPLVQEVEDVDEGLVQDLHGVAAGLLDPVE	89	24
C4	MDEKTTGWRGCHVVEGLAGELEQLRARLEHHPQGQREPLVQEVEDVDEGLVQ	88	25
M1	MDEKTTGWRGCHVVEGLAGELEQLRARLEHHPQGQREPLVQEVEDVDEGLVQ	0.065	26
N1	MD	69	27
N2	MD	30	28
N3	M	0.058	29

Fig. 5

(SEO ID No.: 37)

[illegible]

**Fig. 6A**

GCTACGGCTAGGTATCTCAGTTCGGTGTAGTCTCGTCCAGAGTGGGTGTGTGCACGAACCCCCCGTTTCAGCCC  
GACCGCTGCGCCCTTATCCGGTAACATATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCAC  
TGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGGTCTACAGAGTCTTGAAGTGGTGGCCTAACTACGGCTACACTA  
GAAGGACAGTATTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAGAGAGTTGGTAGCTCTTGATCCGGCAAA  
CAAAACCCGCTGGTAGCGGTGGTTTTTTTGTTCAGCAGCAGATACCGCGCAGAAAAAGGATCTCAAGAAGATCC  
TTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAACTCACGTTAAGGATTTTGGTCAATGAACAATAAACTG  
TCTGCTTACATAAACAGTAATACAAGGGGTGTATGAGCCATATTCAACGGGAACGTTCTTGTCTAGGCCGGATTAAA  
TTCCAACATGGATGCTGATTATATGGGTATAAATGGGCTCGCGATAATGTGCGGCAATCAGTGCACAACTATCGAT  
TGTATGGGAAGCCCGATGCGCCAGAGTTGTTCTGAAACATGGCAAGGTAGCGTTGCCAATGATGTTACAGATGAGATG  
GTCAGACTAAACTGGCTGACGGAATTATGCTCTTCCGACCATCAAGCATTTTATCCGTACTCCTGATGATGATGGTT  
ACTCACCACCTGCGATCCCGGGGAAACACAGCATTCAGGTATTAGAAGAATATCCTGATTCAGGTGAAAAATATTGTTGATG  
CGCTGGCAGTGTTCCTGCGCCGGTTGCATTTCGATTCTGTTGTAATTGTCTCTTTTAAACAGCGATCGCGTATTTCGTCTC  
GCTCAGGCGCAATCACGAATGAATAACGGTTGGTGTGATGCGAGTGATTTGATGACGAGCGTAATGGCTGGCCTGTGA  
ACAAGTCTGGAAAGAAATGCATAAACTTTTGCCATTCTCACCGGATTCAGTCGTCACTCATGGTGATTTCTCACTTGATA  
ACCTTATTTTTCAGCGAGGGGAAATTAATAGTTGTATTGATGTTGGACGAGTCGGAATCGCAGACCGATACCGGATCTT  
GCCATCCTATGGAACCTGCCCTCGGTGAGTTTCTCCTTCATTACAGAAACGGCTTTTTCAAAAATATGTTGATAATCC  
TGATATGAATAAATTGCAGTTTCATTGTGATGCTCGATGAGTTTTTCTAAGAAATTAATTCATGAGCGGATACATATTGAA  
TGATATTAGAAAAATAAACAAATAGGGTTCCGCGCACATTTCCCGAAAAAGTGCCACCTGAATTTGTAACGTTAATAT  
TTTGTAAAAATTCGCGTTAAATTTTGTAAATCAGCTCATTTTAAACCAATAGCCGAAATCGGCAAAATCCCTTATA  
AATCAAAAGAAATAGACCGAGATAGGGTTGAGTGTGTTCCAGTTTGGAAACAAGATCCACTATTAAAGAACGTGGACTCC  
AACGTCAAAGGCGGAAAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCCCTAATCAAGTTTTTGGGGTC  
GAGGTCCCGTAAAGCACTAAATCGGAACCCCTAAAGGAGCCCCCGATTAGAGCTTGACGGGGAAGCCGGGAACGTGG  
CGAGAAAGGAAGGAAGAAAGCGAAAGGAGCGGCGCTAGGGCGCTGGCAAGTGTAGCGGTACCGGTACCGGTGCGGTAACCA  
ACACCCCGCGCTTAATGCGCCGCTACAGGGCGGTCCCATTCGCCA

Fig. 6A (continued)



(SEQ ID No.: 38)

MGIEGKLVINGDKGYNGLAEVGKKFEKDTGKIVTVEHPDKLEEKFPQVAATGDGPDIFWAHDFGGYAQSGLLAEI  
 TPDKAFQDKLYPFTWDAVRYNGKLIAYPIAVEALSIIYNKDLLPNPPKTWEEIPALDKELKAKGKSALMFNLQEPYFTWP  
 LIAADGGYAFKYENGKYDIKDVGVNAGAKAGLTFLVDLIKHKHMNADTDYSIAEAAFNKGETAMTINGPWAWSNIDTSK  
 VNYGVTVLPTFKGQPSKPFVGVLSAGINAASPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYYYEEELAKDPRIAA  
 TMENAOQGEIMPNI PQMSAFWYAVRTAVINAASGRQTVDEALKDAQTNSSGSGSGMDEKTTGWRGGHVVEGLAGELEQ  
 LRARLEHHPQGPQREPGSGHHHHHHEFLVPRGSMPCVKCKVAPRNWVKVKNKHLRIYNNMCKTCFNNSIDIGDDTYHGHDD

Fig. 6B

(SEQ ID No.: 39)

MDPCVKCKVAPRNWVKVKNKHLRIYNNMCKTCFNNSIDIGDDTYHGHDD

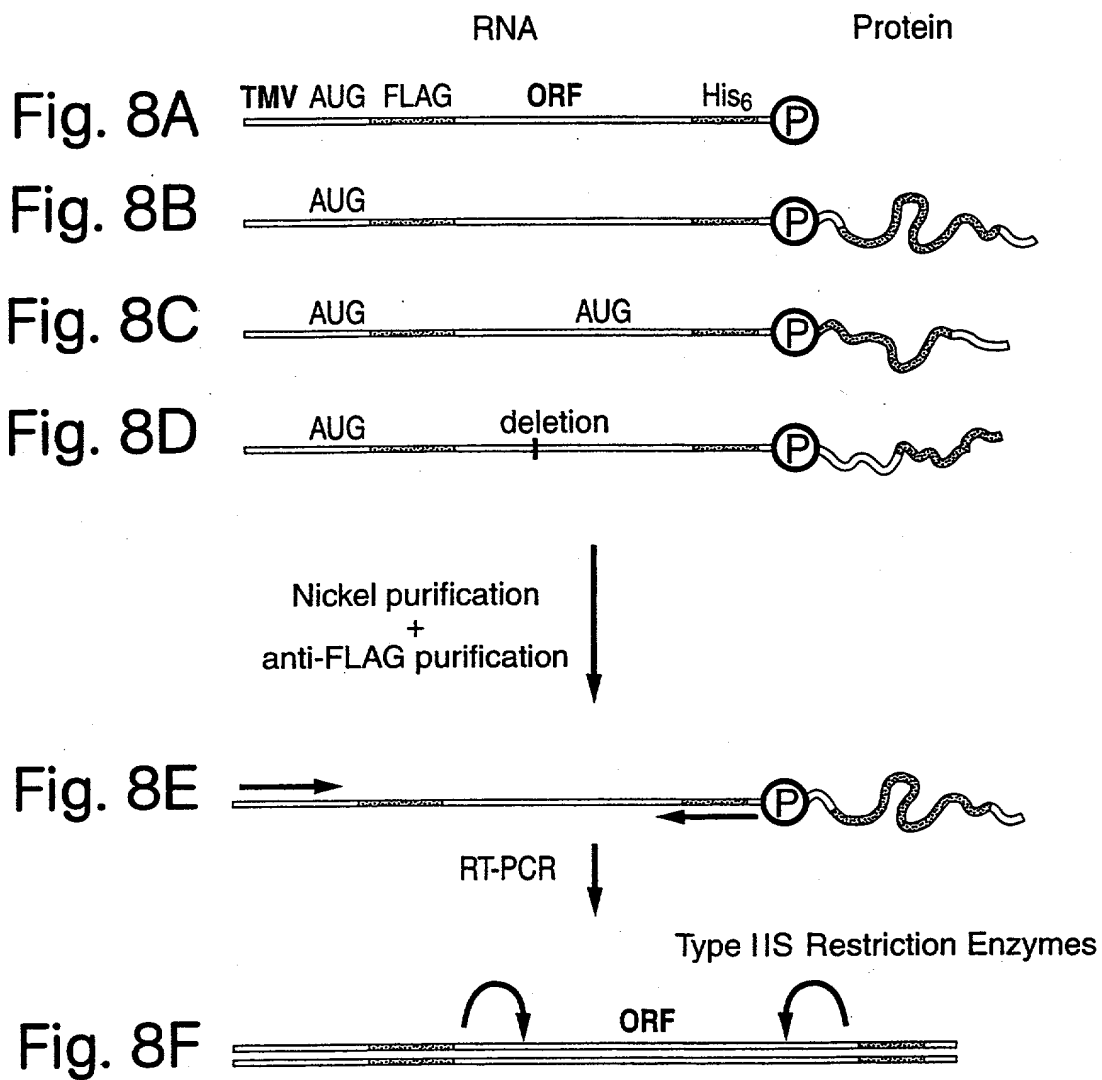
Fig. 6C

MDEKTTGWRGGHVVEGLAGELEQLRARLEHHPQGQREP  


Fig. 7A



Fig. 7B



**Fig. 9A**

ACTATCCGCTGATGACCAGGATGCCATTGCTGTGAAGCTGCCCTGCACATAATGTTCCGGCGTTATTCTTGATGTCTCT  
GACCAGACCCCATCAACAGTATTATTTCTCCCATGAAGACGGTACCGACTGGCGTGGAGCATCTGGTCGCAATTGGG  
TCACCAGCAAAATCGCGCTGTAGCGGCCCATTAAGTTCTGTCTCGCGCGTCTGCGTCTGGCTGGCATAAATATC  
TCACTCGCAATCAAAATCAGCCGATAGCGGAACGGGAAGCGACTGGAGTGCATGTCCGGTTTTCAACAAACCATGCAA  
ATGCTGAATGAGGCATCGTTCCCACTGCGATGCTGGTTGCCAACGATCAGATGGCGTGGCGCAATGCCGCCATTAC  
CGAGTCCGGCTGCGCTTGGTGGGATATCTCGGTAGTGGGATACGACGATACCGAAGACAGCTCATGTTATATCCCGC  
CGTTAACCAACCATCAACAGGATTTTCGCTGCTGGGCAACACGCGTGACCGCTTGTGCAACTCTCTCAGGGCCAG  
GGGTGAAGGGCAATCAGCTGTGCCCCCTCACTGGTGAAGAAAACACCCCTGGCGCCCAATACGAAACCCGCTC  
TCCCCGGCGTTGGCCGATTCAATATGACGTGGCACGACAGGTTTCCCGACTGGAAGCGGGCAGTGAGCGCAACGCA  
ATTAATGTAAGTTAGCTCACTATTAGGCACCGGATCTCGACCGATGCCCTTGAGAGCCTTCAACCCAGTCAGTCCTT  
CCGGTGGCGCGGGCATGACTATCGTCGCCGCACTTATGACTGTCTTTTATCATGCAACTCGTAGGACAGGTGCCGG  
CAGCGCTCTGGGTCAATTTCCGGGAGGACCGCTTTCGCTGGAGCGGACGATGATCGGCCGTGCGGAGAACAGGCCATTATCGCCGG  
ATCTTGACGCCCTCGCTCAAGCCTTCGTCACTGGTCCCGCCACAAACGTTTCGGCGAGAACAGGCCATTATCGCCGG  
CATGGCGGCCCCACGGGTGGCATGATCGTGTCTCTGTGTTGAGGACCCGGCTAGGCTGGCGGGTTGCCCTTACTGGTT  
AGCAGAAATGAATCACCGATACGGAGCGGAACGTGAAGCGACTGCTGTGCAAAACGCTGCGACCTGAGCAACAACATGA  
ATGGTCTTCGGTTTCGGTTTCGTAAGTCTGGAACGCGGAAGTCAGCGCCCTGCACCATTATGTTCCGGATCTGCAT  
CGCAGGATGCTGTGGTACCCCTGTGGAACACCTACATCTGTATTAACGAAGCGCTGGCATTGACCCCTGAGTGATTTTC  
TCTGGTCCCGCGCATCCATACCGCCAGTTGTTACCCCTCACAAAGTTCCAGTAAACGGGCATGTTTCATCATCAGTAACC  
CGTATCGTGAGCATCCTCTCTCGTTTCAATCGGTATCATTAACCCCATGAACAGAAATCCCCCTTACACGGAGGCATCAGT  
GACCAACAGGAAAACCCGCCCTTAACATGGCCCGCTTTATCAGAAGCCAGACATTAACGCTTCTGGAGAACTCAACG  
AGCTGGACGGGATGAACAGGCAGACATCTGTGAATCGCTTACGACCCACGCTGATGAGCTTTACCGCAGCTGCCCTCGCG  
CGTTTCGGTGATGACGGTGAAAACCTCTGACACATGACGCTCCCGGAGACGGTCACAGCTTGTCTGTAAAGCGGATGCCGG  
GAGCAGACAAGCCCGTCAGGGCGGTACGGGGTGTGGGGGTGTCGGGGCGCAGCCATGACCCAGTCACGTAGCGGATA  
GCGGAGTGATACTGGCTTAACATGCGGCATCAGAGCAGATTGTAAGAGTGACCATATATGCGGTGTAATACC  
GCACAGATGCGTAAGGAGAAAATACCGCATCAGCGCTCTTCGGCTTCTCGCTCACTGACTCGCTCGGTCGGTCGTT  
GGTCGGCGAGCGGTATCAGCTCACTCAAAGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAGAAC  
ATGTAGCAAAAGGCCAGCAAAAGGCCAGAACCGGTAAAGGCCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCC  
TGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGGAAACCCGACAGGACTATAAAGATACAGGCGTTTCCCC  
CTGGAAGTCCCTCGTGGCTCTCCTGTTCCGACCTTACCGGATACCTGTCCGCTTCTCCCTTCCTCGGGAAGC  
GTGGCGCTTTCTCATAGCTACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTCCAAAGCTGGGCTGTGTGACGA  
ACCCCCGTTACGCCCGACCGCTGCGCCTTATCCGGTAACATATCGTCTTGAGTCCAAACCCGGTAAGACACGACTTATCGC

Fig. 9A (continued)

CACTGGCAGCACCCTGGTAACAGGATTAGCAGCGAGGTATGTAGCGGTGCTACAGAGTCTTGAAGTGGTGGCCT  
AACTACGGCTACACTAGAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTCGGAAAAAGAGTTGGTAG  
CTCTTGATCCGGCAACAACACCCTGGTAGCGGTGTTTTTTTGTTCAGCAGCAGATTACCGCAGAAAAAAG  
GATCTCAAGAAGATCCTTTGATCTTTCTACGGGTCTGACGCTCAGTGGAAACGAAACTCACGTTAAGGATTTTGGTC  
ATGAACAATAAACTGTCTGCTTACATAAACAGTAATAACAAGGGTGTATGAGCCATATTCAACGGGAAACGCTTTGCT  
CTAGCCCGGATTAATTCACCATGATGCTGATTTATATGGGTATAAATGGGCTCGGATATAATGTCGGCAATCAGGT  
GCGACAACTATCGATTGATGGGAAGCCCGATGCGCCAGAGTTGTTCTGAACATGCAAGGTAGCGTTGCCAATGA  
TGTTACAGATGAGATGGTCAGACTAACTGGCTGACGGAATTTATGCTCTTCCGACCATCAAGCATTTTATCCGTACTC  
CTGATGATGCTGTTACTCACCACTGCGATCCCCGGGAAACAGCATTCAGGTATTAGAAATATCCTGATTCAGGT  
GAAATAATTGTTGATGCGCTGGCAGTGTCTCTGCGCGGTGTCATTCTGTTTGTAAATGTCCTTTTAAACAGCGA  
TCGCGTATTTGCTCGCTCAGCGCAATCACGAATGAATAACGGTTTGGTTGATGCGAGTTCAGTCTCATCTCATG  
ATGGCTGGCCTGTTGAACAAGCTGGAAGAAATGCATAAACTTTTGCCATTCTCACCGGATTGAGTCTGGAATCGCAGA  
GATTTCTCACTTGATAACCTTATTTTGACGAGGGGAAATTAATAGGTTGATTTGATGTTGGACGAGTCGGAATCGCAGA  
CCGATACAGGATCTTGCCATCCTATGGAACCTGCTCGGTGAGTTTCTCCTTCATTACAGAAACGGCTTTTCAAAAAT  
ATGGTATTGATAATCCTGATATGAATAAATTGCAGTTTCAATTGATGCTCGATGAGTTTCTAAGAATTAATTCATGAG  
CGGATACATATTGAATGTTTGAATAAATTGCGGTTAAATTTTGTAAATCAGCTCATTTTAAACCAATAGCCGAAATC  
TTGTAAACGTTAATAATTGTTAAATCAAAAGATAGACCGAGATAGGTTGAGTGTTCAGTTTGGAAACAGAGTCCACTATT  
GGCAAAATCCCTTATAAATCAAAAGATAGACCGAGATAGGTTGAGTGTTCAGTTTGGAAACAGAGTCCACTATT  
AAAGAACGTGGACTCCAACGTCAAAGGGGAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCTAAT  
CAAGTTTTTTGGGTGCGAGTCCGTAAAGCACTAAATCGGAACCCCTAAAGGGAGCCCCCGATTAGAGCTTGACGGGA  
AAGCCGGCAACGTGGCGAGAAAGGAAGAAAGCGGAGGCGGTAGGGCGCTGGCAAGTGTAGCGGTAC  
GCTGCGCGTAACCAACACACCCCGCGCTTAATGCGCGCTACAGGGCGGTCTCCCATTCGCCA

Fig. 9A (continued)

(SEQ ID No.:41)

MGIEGKLVINGDKYNGLAENVGKKFEKDTGIKVTVEHPDKLEEKFPQVAATGDGPDIIFWAHDRFGGYAQSGLLAEI  
 TPKAFQDKLYPFTWDVRYNGKLIAYPIAVEALSIIYNKDLLPNPPKTWEEIPALDKELKAKGKSALMFNLQEPYFTWP  
 LIAADGGYAFKYENGKYDIKDVGVNDNAGAKAGLTFLVDLIKKNHMNADTDYSIAEAAFNKGETAMTINGPWAWSNIDTSK  
 VNYGVTVLPTFFKGQPSKPFVGVLSAGINAASPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYYYEEELAKDPRIAA  
 TMENAOKEIMPNI PQMSAFWYAVRTAVINAASGRQTVDEALKDAQTNSSSGSGSGMDEKTTGWRGGHVVEGLAGELEQ  
LRARLEHHPPQGPQREP GSGHHHHHEF

Fig. 9B

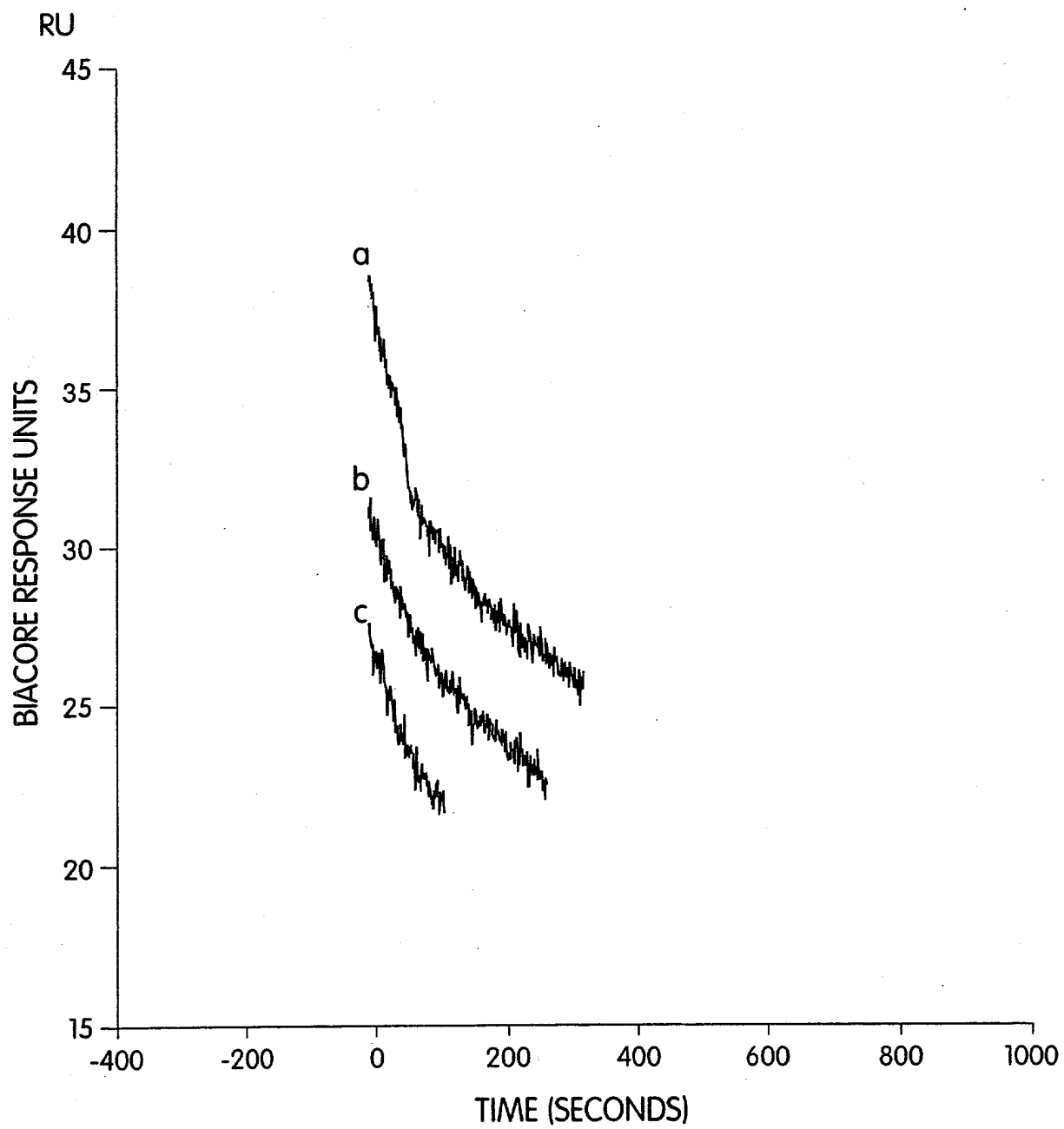


Fig. 10A



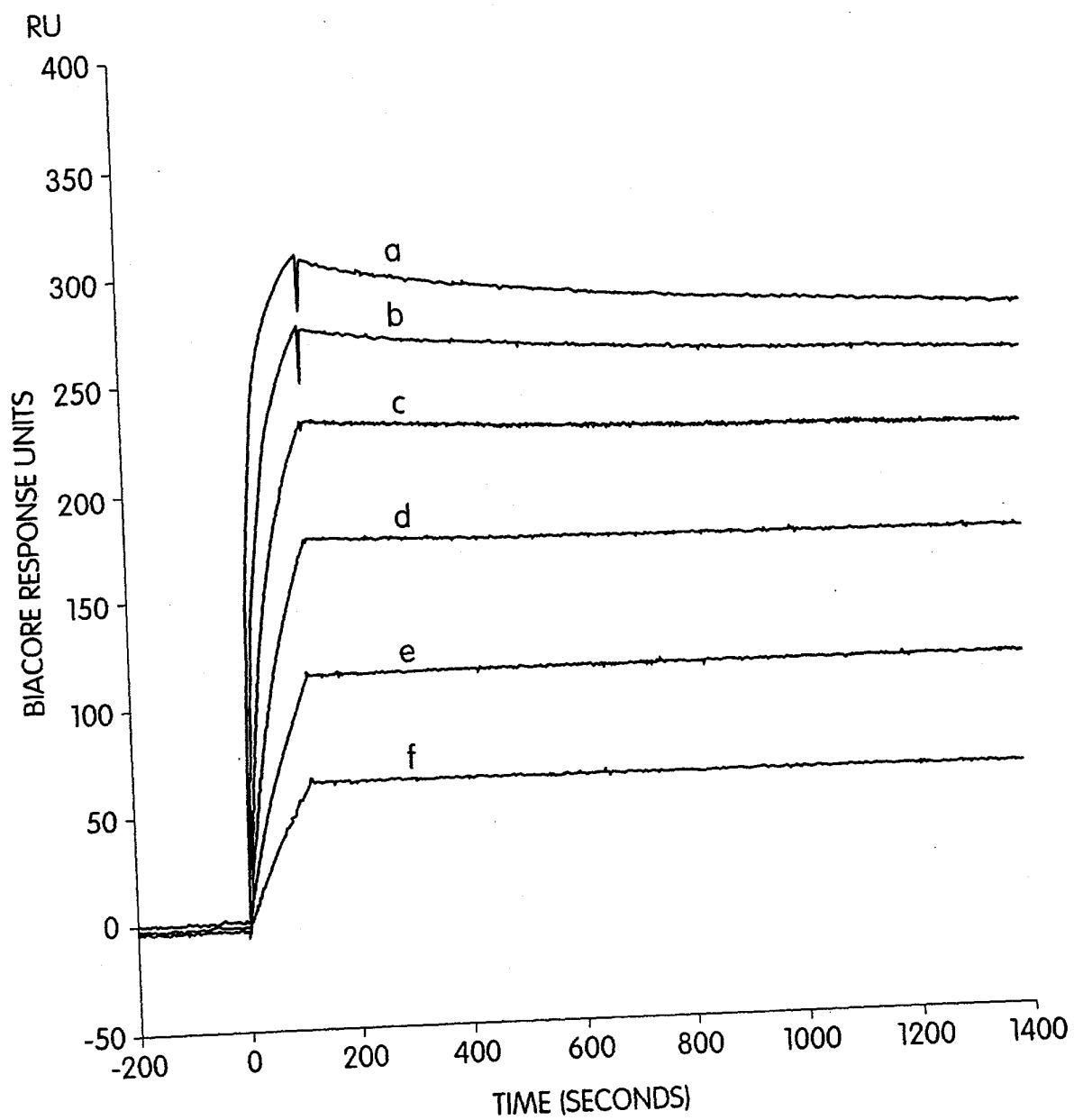
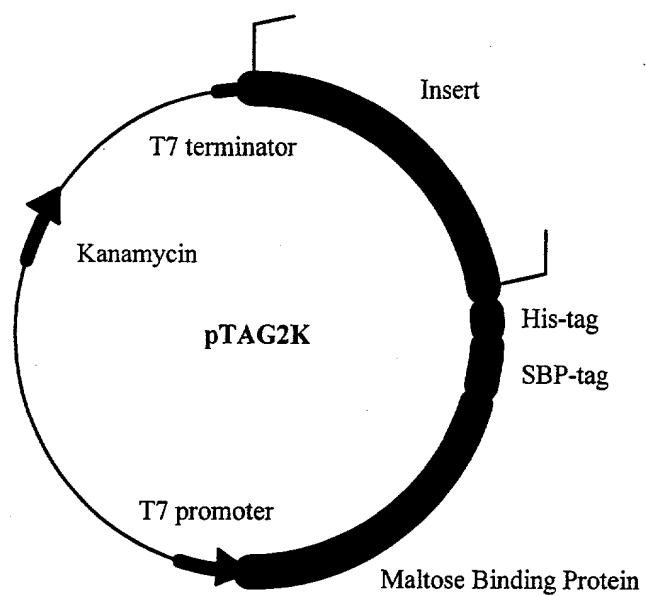


Fig. 10B



**Fig. 11**

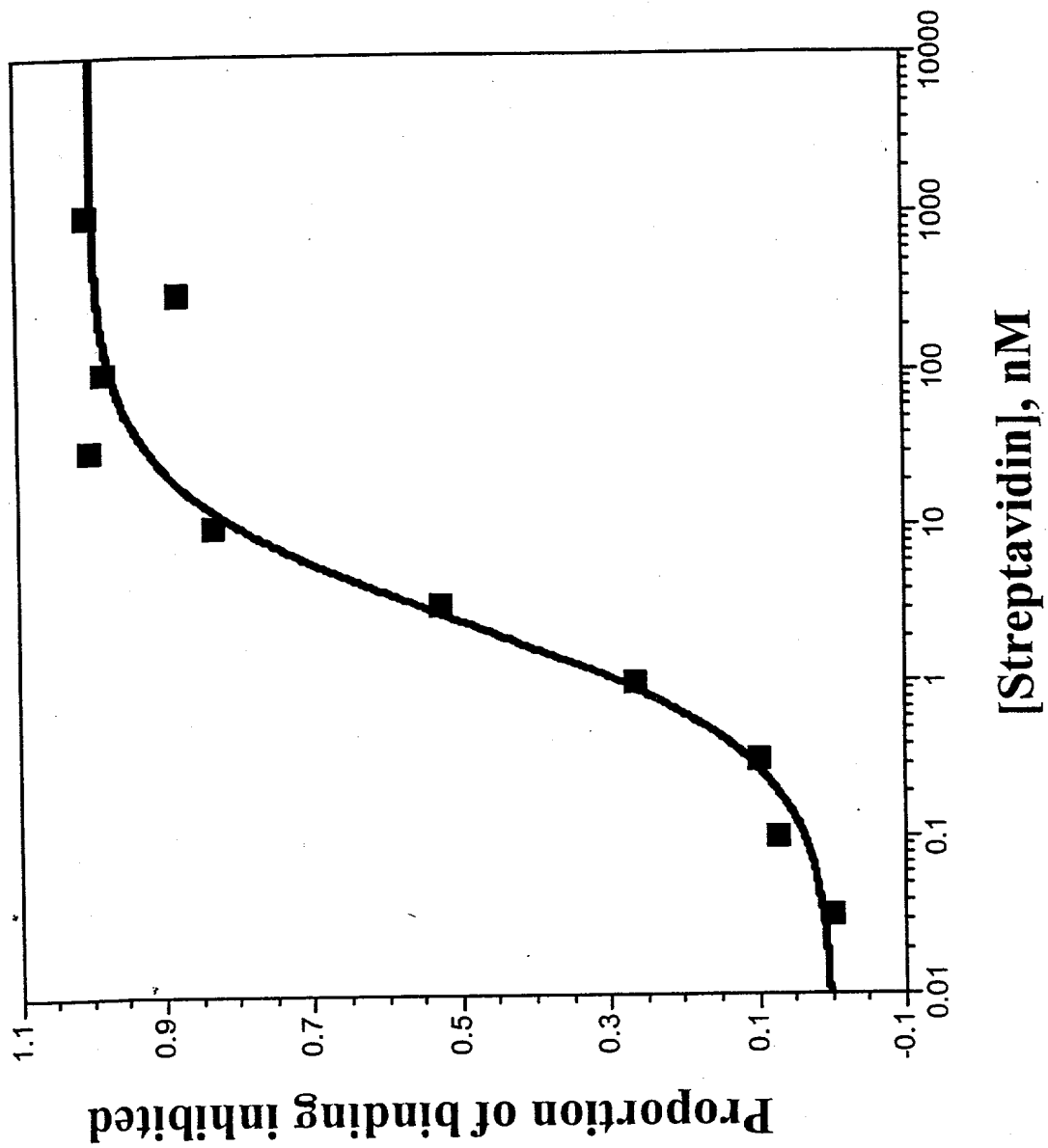


Fig. 12

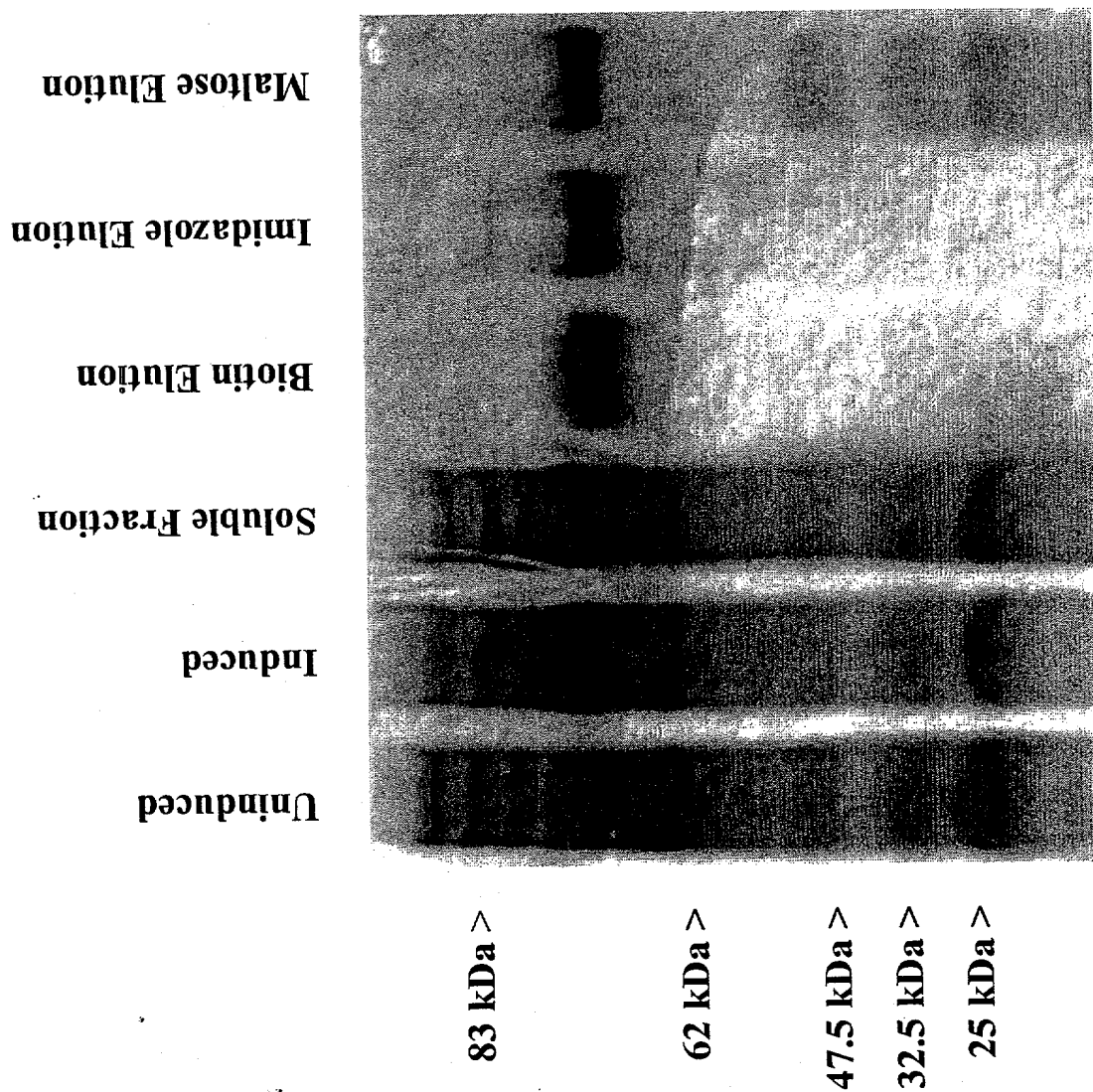
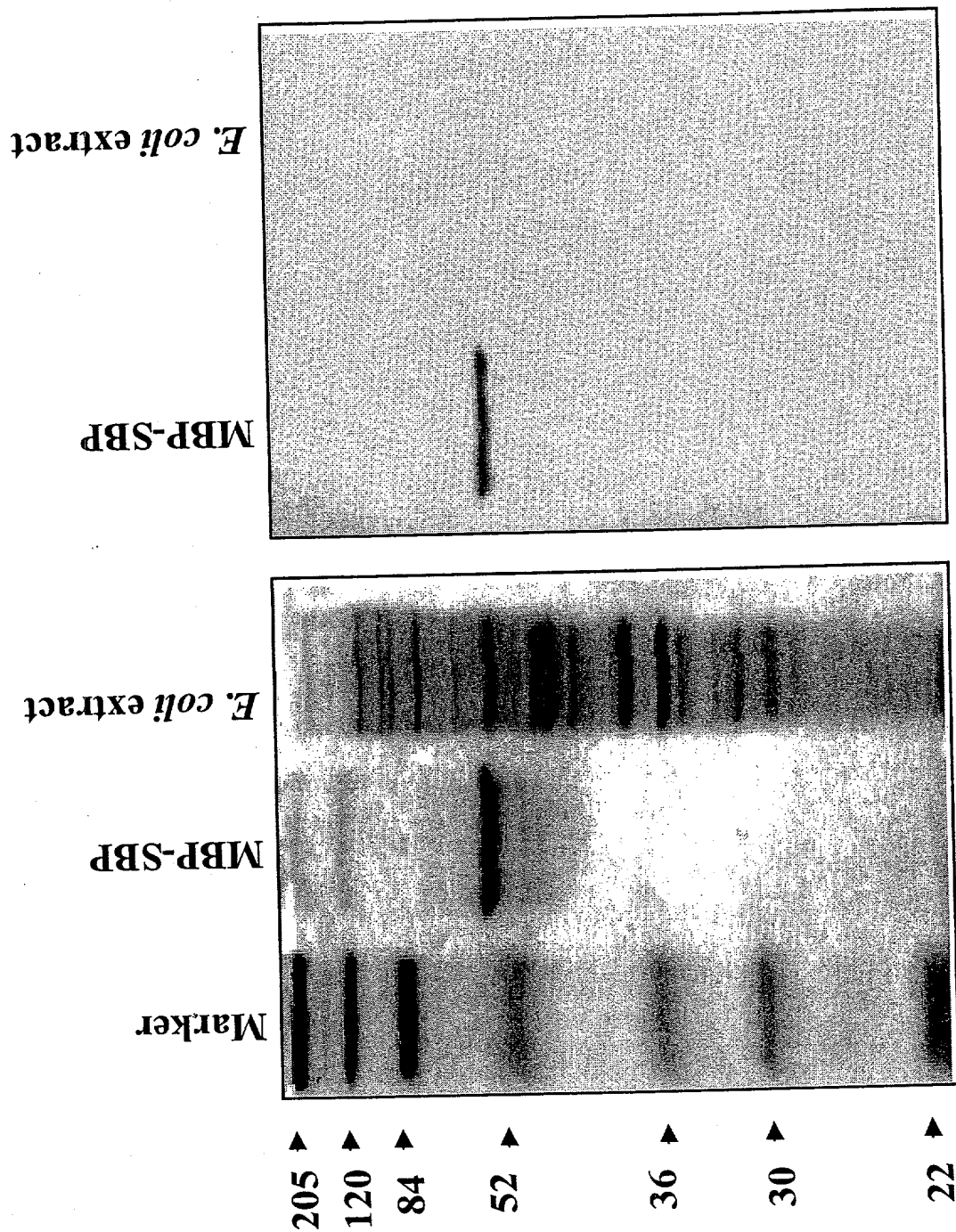


Fig. 13



Blot developed with SA-HRP

Total protein stain

Fig. 14

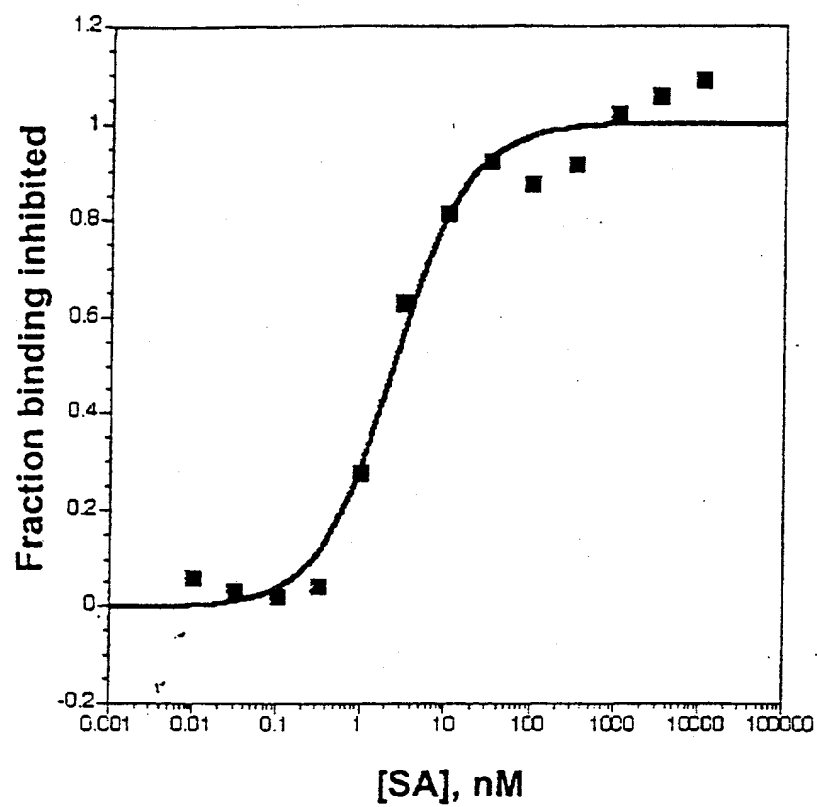


Fig. 15